

Introduction and Background

3

Class I is a strict nondegradation category for irreplaceable drinking water supplies and aquifers associated with ecologically vital systems; Class II is current and potential sources of drinking water and waters having other beneficial uses; and Class III is nondrinkable water based on existing poor quality and isolation from drinking water aquifers. EPA accords different levels of protection to each water class. More detailed guidelines on how the classes will be applied are under development.

In the strategy, EPA states its intention to apply its classification system through all of its programs. Where states have already adopted systems for federally regulated sources that are consistent with EPA's approach, the state system may be used. This proposed federal action provides a strong incentive for states to enact their own strategies and classification systems, particularly when a state's overall policies differ from that of EPA. For example, some states have adopted strict nondegradation policies rather than differential protection. The EPA strategy supports the strengthening of state programs through limited funding and technical support. A \$7 million congressional appropriation was made in 1985 for a grant program to be used by states in developing strategies, tools for ground water management, and information collection systems. This funding will support only a small fraction of the cost of implementing comprehensive protection programs and is anticipated to be renewed on an annual basis. EPA has made a commitment to provide research and technical guidance on such issues as the technology for controlling currently unregulated sources such as surface impoundments.

EXTENT OF CONTAMINATION

There are no adequate data available on a national or even regional scale to estimate the extent of ground water contamination and the impacts of this contamination. Some rough estimates, based on oversimplified assumptions, suggest that 1 to 2 percent of our ground water might be contaminated (U.S. Congress, Office of Technology Assessment, 1984), but these estimates may be low because they do not include nonpoint sources of contamination such as pesticide applications. Even though the total percentage of ground water contaminated may be relatively small, it is significant because the areas of contamination generally occur near population centers with a high demand for clean ground water. Over 225 different chemical, radiological, and biological substances have been detected in ground water across the United States (U.S. Congress, Office of Technology Assessment, 1984). There have been numerous cases of ground water contamination across the United States that have caused severe water supply shortages in local areas. Another problem in estimating the extent of contamination is